AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended). A method of screening ~~proteins or~~and polypeptides to identify a protein or polypeptide having a biological activity of interest, which comprises the sequential steps of (i) forming a ~~gene~~ first library of polynucleotide clones; ~~and synthesizing individual proteins, which can then be screened~~(ii) expressing an individual protein or polypeptide from each clone in the first library to form a second library of individual proteins and polypeptides therefrom; (iii) assaying the second library to select an individual protein or polypeptide in the second library having a biological activity of interest; and (iv) identifying the protein or polypeptide selected in step (iii) by sequencing the polynucleotide from the first library that encodes the selected protein or polypeptide.

Claim 2 (currently amended). A method as claimed in claim 1 wherein the individual proteins ~~or~~and polypeptides ~~can be screened for(a)~~ in the second library are assayed for a biological activity selected from the group consisting of an enzymatic protein or polypeptide modification, ~~and/or (b)~~ binding to ~~one or more other~~ another molecule,~~molecules/ligands and/or (c)~~ binding ~~or biological activity on cells or tissues~~ to a cell or tissue, and modulating the metabolism of a cell or tissue.

Claim 3 (currently amended). A method as claimed in claim 2 wherein the ~~gene~~first library is ~~derived from~~ a library of cellular mRNA ~~from one or more cells or tissues~~.

Claim 4 (currently amended). A method as claimed in claim 2 wherein the ~~gene library encodes proteins or polypeptides comprising a library of variable molecules, such as~~ second library of individual proteins and polypeptides comprises fragments of antibody variable regions.

Claim 5 (currently amended). A method as claimed in claim 4 wherein the ~~proteins or polypeptides are screened for~~ biological activity of interest is binding to one or more proteins or polypeptides from a cell or tissue.

Claim 6 (withdrawn).

Claim 7 (currently amended). A method as claimed in claim 1 wherein the ~~individual members of the gene library are initially~~first library of polynucleotide clones is

distributed into ~~one or more arrays whereby each gene is then~~ an array of polynucleotides, and in step (ii) each polynucleotide in the array is then expressed to generate ~~one or more protein or polypeptide arrays~~ an array of individual proteins and polypeptides.

Claim 8 (currently amended). A method as claimed in claim 7 wherein the array of individual proteins ~~or~~and polypeptides ~~are~~is immobilized onto a solid phase.

Claim 9 (withdrawn).

Claim 10 (currently amended). A method as claimed in claim 8 wherein the solid phase is a ~~continuous surface such as a~~ glass plate and wherein the proteins ~~or~~and polypeptides are immobilized at specific loci on the surface of the plate.

Claim 11 (currently amended). A method as claimed in claim 7 wherein the individual proteins ~~or~~and polypeptides are expressed from the polynucleotides in the first library by *in vitro* transcription and translation.

Claims 12-13 (cancelled).

Claim 14 (withdrawn).

Claim 15 (currently amended). A method for screening proteins ~~or~~and polypeptides to identify a protein or polypeptide having a biological activity of interest, which comprises the sequential steps of:

(i) ~~Generating a gene~~generating a first library of polynucleotides in the form of clones selected from the group consisting of DNA molecules, RNA molecules, cell colonies, ~~or~~and plaques;

(ii) ~~Converting the nucleic acid~~expressing a polynucleotide from each clone in the first library using *in vitro* translation to generate ~~proteins or polypeptides~~ a second library of individual proteins and polypeptides therefrom;

(iii) ~~Dispensing aliquots~~dispensing an aliquot of each protein or polypeptide in the second library into a specific ~~loci~~locus in a multi-well ~~plates~~plate or a solid phase to form a protein ~~or~~and polypeptide ~~arrays~~array; ~~and~~

(iv) ~~Bringing the arrays generated (iii) into contact with one or more extracts from cells or tissues or with one or more cells or tissues *per se*~~

~~in order to screen for protein or polypeptide modification or for binding to one or more molecules from the one or more extracts.~~contacting the array generated in step (iii) with a material selected from the group consisting of a cell extract, a tissue extract, a cell sample, and a tissue sample;

(v) assaying each protein and polypeptide in the array to select an individual protein or polypeptide that interacts with the material contacting the array in step (iv), and

(vi) identifying the individual protein or polypeptide selected in step (v) by sequencing the polynucleotide that encodes the selected protein or polypeptide;

wherein the interaction of the protein or polypeptide with the material contacting the array in step (v) is an interaction selected from the group consisting of modification of a protein or polypeptide in the array, binding of a protein or polypeptide in the array to a molecule from a cell, and binding of a protein or polypeptide in the array to a molecule from a tissue.

Claims 16-25 (cancelled).

Claims 26-42 (withdrawn).

Claims 43-56 (cancelled).

Claim 57 (withdrawn).